**JOB DESCRIPTION**

**Ref:**

**Job Title: Research support engineer position on development of atmospheric emission models**

**About BSC:**

**BSC-CNS (Barcelona Supercomputing Center – Centro Nacional de Supercomputación) is the National Supercomputing Facility in Spain and was officially constituted in April 2005. BSC-CNS manages MareNostrum, one of the most powerful supercomputers in Europe, located at the Torre Girona chapel. The mission of BSC-CNS is to investigate, develop and manage information technology in order to facilitate scientific progress. BSC combines HPC service provision and R&D into both computer and computational science (life, earth and engineering sciences) under one roof and currently has over 400 staff from 41 countries. To get an idea of what it’s like to work at the BSC take a look at this video:** <https://www.youtube.com/watch?v=VRkEii7OzRE>

**Context and Mission:**

The Atmospheric Composition group from the Earth Science department at the BSC-CNS searches for one junior research support engineer willing to work on the development of a multiscale atmospheric emission model for supporting air quality modelling research. **The position will support the developments to set up this model, including the buildup of activity data and emission factor databases and geographical and temporal proxies on inter- and trans-disciplinary collaboration with other projects at** the Earth Science department **and external partners. The successful applicant will work closely with providers of emission and activity data at the global, European level as well as national and city levels to build and evaluate emission inventories suitable for studies of air pollution at scales ranging from urban- to global-scale.**

**Key Duties**

* **Collection and processing of activity and emission data for use in model development.**
* **Development of spatial and temporal profiles for different emission sectors.**
* **Geoprocessing and spatial analysis using GIS tools.**
* **Development and assessment of emission estimation methodologies.**
* **Analysis, benchmarking and inter-comparison of emission inventories.**
* **Interact with atmospheric composition scientists to understand and respond to their needs.**

**Requirements**

* **Education**
  + **A graduate degree in the physical sciences or engineering (e.g., Chemistry, Meteorology, Physics, Environmental Engineering, Chemical Engineering), Master in Environmental Engineering or similar.**
* **Knowledge**
  + Experience with GIS data and tools.
  + **Experience in programming especially in Python and R is a plus.**
  + Fluent English, both written and spoken.
  + Experience with emission inventory development is a plus
* **Professional Experience**
  + **Experience in similar fields will be valued.**

**Conditions**

The position will be located at BSC within the Earth Sciences department in collaboration with the specific program coordinator. The contract will be for 1 year with the possibility of extension.

**Applications Procedure**

All applications must be applied in LINK including:

1. A motivation letter
2. A full CV including contact details

***OTHER DETAILS INTERNAL USE:***

***Duration of the contract:*** The duration of the contract will be for 1 year with the possibility of extension.

***Funding Project:*** Mexico project (phase 2, under negotiation)

***Salary Range:*** 25-28 brutos anuales